	Application No.	Applicant(s)
Notice of Allowability	10/092,906	CHEN ET AL.
	Examiner	Art Unit	
	Peter Coughlan	2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *5/17/2006*.

2. ☒ The allowed claim(s) is/are *20-37*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DAVID VINCENT
SUPERVISORY PATENT EXAMINER

Reasons For Allowance

1.   Claims 20-37 are allowed.

2.   The following is an examiner's statement of reasons for allowance:

None of the references of record alone or in combination disclose or suggest the

combination of limitations specified in the independent claims including the use of a

neural network that controls the frequency of the central processing unit. Input

parameters of the neural network include devices as intelligent drive electronics (IDE),

peripheral component interconnect (PCI) and accelerated graphics port (AGP), previous

and current used clock multiplier factors, direct memory access controller (DMA),

generating an output vector according to the weights of a neural network, using the

output vector to determine the clock multiplier factor, altering the frequency of the

central processing unit in accordance with the clock multiplier factor. The neural network

is of a radial basis function in which the function is a Gaussian and multiquadric function,

as specified in claims 20-37.

The closest prior art (U. S. Patent 6715089: Zdravkovic) Zdravkovic teaches

input parameters in a neural network determines CPU frequency and changing the CPU

frequency according to an output vector of a neural network but fails to teach

determining a clock multiplier factor by the output vector, the neural network is a radial

basis function, a Gaussian function and a multiquadric function, the output is according

to basis weights, the environmental parameters comprise a clock multiplier factor that the CPU uses currently and previously, parameter conditions for an IDE, DMA, AGP, PCI (U. S. Patent 6216234: Sager) teaches determining a clock multiplier factor by the output vector. ('On-line adaptive chaotic demodilator based of radial-basis-function neural network': Feng) teaches the neural network is a radial basis function, a Gaussian function and a multiquadric function, the output is according to basis weights. (U. S. Patent 6136583: Lin, or U. S. Patent 6219642: Asghar, or U. S. Patent 6092018: Puskorius) teaches the environmental parameters comprise a clock multiplier factor that the CPU uses currently and previously. ('HP Kayak XU800 PC workstation, Technical Reference Manual': Hewlett) teaches parameter conditions for an IDE, DMA, AGP, PCI.

The references either by themselves or in combination fail to teach that the environmental parameters of the Intelligent Drive Electronics (IDE), Accelerated Graphics Port (AGP) and Peripheral Component Interconnect (PCI) are necessary input components of a neural network that determines the frequency of the CPU.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Coughlan whose telephone number is (571) 272-

5990, Monday through Friday from 7:15 a.m. to 3:45 p.m. or contact the Supervisor Mr.

David Vincent at (571) 272-3687.

Peter Coughlan

Patent Examiner

7/12/2006